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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/635,777 | 08/11/2000 | Wilburt Juan Labio | GIGA-005/00US | 9623 |

25920 7590 06/08/2004

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|---|---|
| DUONG, OANH L | |
| **ART UNIT** | **PAPER NUMBER** |
| 2155 | 17 |

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/635,777 | LABIO ET AL. | |
| | Examiner | Art Unit | |
| | Oanh L. Duong | 2155 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,11-23,34-38,40,41,44 and 46-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,11-23,34-38,40,41,44 and 46-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claims 2-10, 24-32, 39, 42-43, 45, and 55-64 have been cancelled.

Claims 1, 11-23, 34-38, 40-41, 44 and 46-54 are presented for examination.

### *Claim Objections*

1. Claim 53 is objected to because of the following informalities: the features "the content data" and "the current connectivity lacks of antecedent basis. Appropriate correction is required.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 1, 11-23, 33-38, 40-41, 44, and 46-54 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 11, 12, 23, 33, 46-48 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joffe et al. (Joffe) (US 6,185,619 B1) in view of Adams (US 6,055,568).

Regarding claim 1, Joffe teaches a method for searching comprising:

collecting data about a plurality of computers (col. 11 lines 4-14), including a network location of each of the plurality of computers (col. 10 line 65-col. 11 line 4);

selecting at least one computer to be a selected computer based on the collected data (col. 14 lines 12-16);

routing a search query from a user to the selected computer via the network location of the selected computer (col. 22 lines 28-31);

forming a profile characterizing the at least one computer based on information provided by the signal (col. 11 line 66-col. 12 line 7).

Joffe does not explicitly teach a peer-to-peer architecture.

Adams, in the same field of endeavor, teaches a peer-to-peer computer (Fig. 1) sending a signal to at least one of the plurality of computers (col. 3 lines 56-67);

receiving the signal upon its return from the at least one computer (col. 4 lines 9-14);

wherein the profile comprises one or more of:

a round trip time measure taken by the signal during its travel to and from the at least one computer (col. 4 lines 9-18);

information on a number of files contained within the at least one computer;

information on an amount of content available to the network on the at least one computer;

information on the at least one computer's capacity to process a search query;

information on a number of connected computers encountered by the signal during its travel to and from the at least one computer;

information on a number of additional computers connected to the at least one computer;

information on a frequency with which the plurality of computer are connected to the network; and

information on which of the plurality of computers are currently connected to the network.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the peer-to-peer architecture of Adams in the process of searching in Joffe because such a peer-to-peer architecture would allow a search to be performed by a large number of systems in which the load on the network is widely distributed and balanced, thereby resulting in better performance and response times.

Regarding claim 11, Joffe teaches a method for searching comprising:

collecting data about a plurality of computer (col. 11 lines 4-14), including a network location of each of the plurality of computers (col. 10 line 65-col. 11 line 4), the collecting of data including,

collecting a plurality of statistical measures which characterize each of the plurality of computer (e.g., site1 metric1, site2 metric 2...site N metricN), assigning a weighted score (i.e., metric) to each statistical measure for each of the plurality of computers, combining the weighted scores to obtain a rank for each of the plurality of computer; and ranking the plurality of computers according to the weighted scores (col. 14 line 25-63);

selecting at least one computer to be selected computer, based on the collected data (col. 14 lines 64-col. 15 line 8);

routing a search query from a user to the selected computer (col. 22 lines 28-31);

Joffe does not explicitly teach a peer-to-peer architecture.

Adams, in the same field of endeavor, teaches a peer-to-peer computer (Fig. 1, col. 2 lines 36-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the peer-to-peer architecture of Adams in the process of searching in Joffe because such a peer-to-peer architecture would allow a search to be performed by a large number of systems in which the load on the network is widely distributed and balanced, thereby resulting in better performance and response times.

Regarding claim 12, Joffe-Adams teaches monitoring data exchanges between the plurality of computers (Joffe, col. 11 lines 57-65).

Regarding claim 23, a system of claim 23 has a corresponding method of claim 1; therefore, claim 23 is rejected under the same rationale as applied to claim 1.

Regarding claim 33, Joffe-Adams teaches monitoring data exchanges between the plurality of computers (Joffe, col. 11 lines 57-65).

Regarding claim 46, a computer program of claim 46 has a corresponding method of claim 1; therefore, claim 46 is rejected under the same rationale as applied to claim 1.

Regarding claim 47, a computer program of claim 47 has a corresponding method of claim 11; therefore, claim 47 is rejected under the same rationale as applied to claim 11.

Regarding claim 48, Joffe-Adams teaches monitoring data exchanges between the plurality of computers (Joffe, col. 11 lines 57-65).

Claim 53 is rejected under the same rationale as applied to claim 11.

Regarding claim 54, Joffe teaches the plurality of geographical locations are selected based on a respective proximity of each one of the plurality of geographic locations to a user (12 lines 8-15).

4. Claims 13, 14, 16, 17, 19-21, 34-35, 38, 40, 41, 49, 50 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joffe et al. (Joffe) (US 6,185,619 B1) in view of Adams (US 6,055,568) in further view of Hirosawa et al. (Hirosawa) (US 6,718,391 B1)

Regarding claims 13 and 49, Joffe-Adams does not explicitly teach storing content data.

Hirosawa, in the same field of endeavor, teaches storing the collected data in a memory (col. 6 lines 28-30), wherein at least a portion of the collected data is content data which includes information on the content data available for searching on the plurality of computers (col. 2 lines 15-18). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have utilized the content data of Hirosawa in the process of collecting data in Joffe-Adams because it was conventionally employed in the art to allow a next request for the same content to be processed quicker.

Regarding claim 14, Joffe teaches a method for searching, comprising:

collecting data about a plurality of computer (col. 11 lines 4-14), including a network location of each of the plurality of computers (col. 10 line 65-col. 11 line 4);

storing the collected data in a memory (col. 11 line 66-col. 12 line 7);

selecting at least one computer to be a selected computer based on the collected data (col. 14 lines 12-16);

routing a search query from a user to the selected computer via the network location of the selected computer (col. 22 lines 28-31);

Joffe does not explicitly teach a peer-to-peer architecture, removing the content after a predetermined period of time, sending a common user search query into the network on a period basis, and storing a result of the common user search query in the memory

Adams, in the same field of endeavor, teaches a peer-to-peer computer (Fig. 1, col. 2 lines 36-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the peer-to-peer architecture of Adams in the process of searching in Joffe because such a peer-to-peer architecture would allow a search to be performed by a large number of systems in which the load on the network is widely distributed and balanced, thereby resulting in better performance and response times.

Hirosawa, in the field of endeavor, teaches at least a portion of the collected data is content data which includes information on the content data available for searching on the plurality of computer (col. 2 lines 15-18); sending a common user search query into the network on a period basis (col. 5 lines 1-12); storing a result of the common user search query in the memory (col. 6 lines 28-30). In addition, Hirosawa teaches caching (col. 4 lines 25-28). It would have been obvious to one having ordinary skill in

the art at the time the invention was made to readily recognize that the cache mechanism includes removing content data after a predetermined period of time in order to minimize the probability that users will access stale data.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the following steps: removing the content after a predetermined period of time, sending a common user search query into the network on a period basis, and storing a result of the common user search query in the memory of Hirosawa in the process of collecting data of Joffe because it was conventionally employed in the art to allow a next request for the same data/object to be processed quicker.

Regarding claims 16 and 38, Joffe-Adams-Hirosawa teaches monitoring a current connectivity status of each of the plurality of computers (Adams, col. 3 lines 26-45).

Regarding claim 17, Joffe teaches collecting a plurality of statistic measures which characterize each of the plurality of computers (Joffe, col. 11 lines 4-14); assigning a weighted score (i.e., metric) to each statistical measure for each of the plurality of computers, combining the weighted scores to obtain a rank for each of the plurality of computer; and ranking the plurality of computers according to the weighted scores (Joffe, col. 14 line 25-63); selecting the selected computer based on the content data (Joffe, col. 14 lines 64-col. 15 line 8 ), the current connectivity status within the peer-to-peer network (Adams, col. 3 lines 26-45).

Regarding claims 19 and 40, Joffe teaches selecting a second computer based on the collected data (col. 22 lines 26-27) and routing the search query from the user to the second selected computer (col. 22 lines 38-45).

Regarding claims 20 and 41, Joffe teaches geographical locations are selected based on a respective proximity of each of the plurality of geographical locations to the user (col. 12 lines 11-15).

Regarding claim 21, collecting of data about the plurality of computers within peer-to-peer network is performed periodically (Adams, col. 6 lines 48-50).

Regarding claim 34, a system of claim 34 has a corresponding method of claim 14; therefore, claim 34 is rejected under the same rationale as applied to claim 14.

Regarding claim 35, a system by which a user may establish an optimal connection (abstract) comprising:

A monitor for measuring data about a plurality of computer (col. 11 lines 4-14), the monitor including:

A profiler which collects the measured data (col. 11 line 66-col. 12 line 7);

A database which stores the data collected by the profiler (col. 11 line 66-col. 12 line 7);

Selector for selecting at least one of the plurality of computers to be a selected computer, based on the measured data, and which outputs a network location of the selected to the user, to thereby allow the user to connect to the selected computer (col. 20 line 65-col. 21 line 8);

Joffe does not explicitly teach a peer-to-peer architecture, and a memory for collecting the measured data wherein the measured data includes information on content available for searching on the plurality of computer, wherein the memory removes the content data after a predetermined period of time, further wherein the memory sends common user search query into the network on a period basis and store the results.

Adams, in the same field of endeavor, teaches a peer-to-peer computer (Fig. 1) sending a signal therefrom, to thereby form a profile of the at least one of the plurality of computers (col. 3 lines 56-67); and

receiving the signal upon its return from the at least one computer (col. 4 lines 9-14);

wherein the profile comprises one or more of:

a round trip time measure taken by the signal during its travel to and from the at least one computer (col. 4 lines 9-18);

information on a number of files contained within the at least one computer;

information on an amount of content available to the network on the at least one computer;

information on the at least one computer's capacity to process a search query;

information on a number of connected computers encountered by the signal during its travel to and from the at least one computer;

information on a number of additional computers connected to the at least one computer;

information on a frequency with which the plurality of computer are connected to the network; and

information on which of the plurality of computers are currently connected to the network.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the peer-to-peer architecture of Adams in the process of searching in Joffe because such a peer-to-peer architecture would allow a search to be performed by a large number of systems in which the load on the network is widely distributed and balanced, thereby resulting in better performance and response times.

Hirosawa, in the field of endeavor, teaches at least a portion of the collected data is content data which includes information on the content data available for searching on the plurality of computer (col. 2 lines 15-18); sending a common user search query into the network on a period basis (col. 5 lines 1-12); storing a result of the common user search query in the memory (col. 6 lines 28-30). In addition, Hirosawa teaches caching (col. 4 lines 25-28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to readily recognize that the cache mechanism includes removing content data after a predetermined period of time in order to minimize the probability that users will access stale data.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the following steps: removing the content after a predetermined period of time, sending a common user search query into the network on a period basis, and storing a result of the common user search query in the memory of Hirosawa in the process of collecting data of Joffe because it was conventionally employed in the art to allow a next request for the same data/object to be processed quicker.

Regarding claim 50, Joffe-Adams does not explicitly teach program instructions as claimed.

Hirosawa, in the field of endeavor, teaches program sending a common user search query into the network on a period basis (col. 5 lines 1-12); and program instructions for storing a result of the common user search query in the memory (col. 6 lines 28-30). In addition, Hirosawa teaches caching (col. 4 lines 25-28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to readily recognize that the cache mechanism includes removing content data after a predetermined period of time in order to minimize the probability that users will access stale data.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the following steps: removing the content after a predetermined period of time, sending a common user search query into the network on a period basis, and storing a result of the common user search query in the memory of Hirosawa in the process of collecting data of Joffe-Adams because it was conventionally

employed in the art to allow a next request for the same data/object to be processed quicker.

Regarding claim 52, Joffe-Adams-Hirosawa teaches monitoring a current connectivity status of each of the plurality of computers, wherein the selected computer based on the content data and the current connectivity status (Adams, col. 3 lines 26-45)

5. Claims 18 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joffe in view of Adams in view of Hirosawa et al. (Hirosawa) in further view of Scharber (US 6,542,964 B1).

Regarding claims 18 and 36, Joffe-Adams-Hirosawa does not explicitly teach explicitly teach storing a portion of the content data as claimed. However, Scharber teaches explicitly teach storing a portion of the content data which identifies a type of file available for searching on the plurality of computers, wherein the selected computer is selected based in part on the type of file (e.g., see abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the storing step in Joffe-Adams-Hirosawa as taught by Scharber because such storing step would allow dynamic protocol selection for a hosting computer. Thus, influence of factors such as network latency, network congestion, server availability during selection is eliminated.

6. Claims 15, 37 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joffe in view Adams in view of Hirosawa in further view of Ishikawa et al (Ishikawa) (JP 11015707 A).

Regarding claim 15, 37 and 51, Joffe-Adams-Hirosawa does not teach storing a portion of the content data based on previous user requests. However Ishikawa teaches storing a portion of the content data based on previous user requests (see abstract). Therefore, it would have bee obvious to a person of ordinary skill in the art at the time the invention was made to combine storing a portion of the content data based on previous user requests in Joffe-Adams-Hirosawa as taught by Ishikawa because it was conventionally employed in the art to allow usage of a limited cache area, thereby reducing data acquisition cost.

7. Claims 22 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joffe in view of Adams in further view of Nagae (US 6,006,248).

Regarding claim 22, Joffe-Adams teaches the host monitor collects data about a predetermined number of the plurality of computer a first predetermined time interval (Adams, Fig1 and col. 6 lines 48-50); ranking the predetermined number of the plurality of computers based on the collected data (Joffe, col. 14 lines 25-63), retaining a set of hub computers which make up a predetermined percentage of the plurality of computer that are most highly ranked (Joffe, col. 14 lines 25-63).

Joffe-Adams does not teach teaches collects data about only the set of hub computers at a second predetermined time interval, wherein the second predetermined

time interval is smaller than the first predetermined time interval. Nagae teaches collects data about only the set of hub computers at a second predetermined time interval, wherein the second predetermined time interval is smaller than the first predetermined time interval (e.g., see fig. 29, col. 25 lines 63-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teaching of Nagae with the teachings of Joffe-Adams because such collecting data would enable an appropriate objective computer to be selected so that a performance of the objective computer may not be deteriorated (Nagae, col. 1 lines 60-64).

Regarding claim 44, Joffe teaches a system by which a user may establish an optimal connection to a computer network (abstract), comprising:

A monitor for measuring data about a plurality of computer (col. 11 line 57- col. 12 line 23);

A selector for selecting at least one of the plurality of computer to be a selected computer, based on the measured data, and which outputs a network location of the selected computer to the user, to thereby allow the user to connect to the selected computer (col. 20 line 65-col. 21 line 8);

Wherein the monitor collects data about a predetermined number of the plurality of computers at a first predetermined time interval (col. 12 lines 20-23), the selector ranking the computers accordingly (col. 14 lines 25-63), and retaining a set of hub computers which make up a predetermined percentage of the plurality computers which are most highly-ranked (col. 14 lines 25-63).

Joffe does not explicitly teach a peer-to-peer architecture, and collect data at a second predetermined time interval, wherein the second predetermined time interval is smaller that the first predetermined time interval.

Adams, in the same field of endeavor, teaches a peer-to-peer computer (Fig. 1, col. 2 lines 36-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the peer-to-peer architecture of Adams in the process of searching in Joffe because such a peer-to-peer architecture would allow a search to be performed by a large number of systems in which the load on the network is widely distributed and balanced, thereby resulting in better performance and response times.

Nagae, in the same field of endeavor, teaches collects data at a second predetermined time interval, wherein the second predetermined time interval is smaller than the first predetermined time interval (e.g., see fig. 29, col. 25 lines 63-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teaching of Nagae with the teachings of Joffe because such collecting data would enable an appropriate objective computer to be selected so that a performance of the objective computer may not be deteriorated (Nagae, col. 1 lines 60-64).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh L. Duong whose telephone number is (703) 305-0295. The examiner can normally be reached on Monday- Friday, 8:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.D
May 31, 2004

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER